

### **REMARKS**

The Office Action of April 29, 2009, has been carefully studied. Claims 2 and 3 currently appear in this application. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration and formal allowance of the claims.

### **Claim Amendments**

Claim 3 has been amended to exclude nitrogen from the definition of X when X is a heteroatom, and to specify that Y is a monovalent or multivalent anion of an organometallic complex selected from the group consisting of azo, thiocatechol chelate, thiobisphenolate chelate, bsdithiol-alpha-diketone and bisphenyldithiols. Support for these amendments can be found in the specification as filed at page 4, lines 5-15, page 7, lines 6-5 from the bottom, and Chemical Formulae 1-15, 18 and 19.

### **Art Rejections**

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al., JP 10-310715. The Examiner cited the general formula in Kobayashi, although the Examiner concedes that Kobayashi does not teach compounds in which m is an integer of 2 or greater. The Examiner's position is that one of ordinary skill in the art would be motivated to create the herein claimed compounds with a reasonable expectation of success.

This rejection is respectfully traversed.

Claim 3 has been amended to make the claimed cyanine dye compounds more distinct from the Kobayashi compounds. As recited in amended claim 3, the cyanine dyes claimed herein are represented by General Formula 2, wherein X denotes a carbon atom or heteroatom of group 15 or 16 of the periodic table **excluding a nitrogen atom**. In contrast thereto, the compounds disclosed in Kobayashi have a nitrogen atom in the position corresponding to X in General Formula 2 of the present claims.

Furthermore, claim 3 has been amended to specify that Y is a monovalent or multivalent anion of **an organometallic complex selected from the group consisting of azo, thiocatechol chelate, thiobisphenolate chelate, bisdithiol-alpha-diketone, and bisphenyldithiols**. Contrary to this, M<sub>1</sub> in Kobayashi is an anion or cation such as a hydrogen ion, an alkali metal ion, an alkali earth metal ion, or a halogen ion.


The conditions that Y is a monovalent or multivalent anion of an **organometallic complex** provides an unexpectedly high light resistance for the cyanine dyes claimed herein. This is shown in Table 1 at page 32 of the present specification. Table 1 shows the experimental results in which cyanine dyes of Chemical Formula 2 having an anion of an organometallic complex had a residual dye rate of 91.3%, while the conventional cyanine dyes of Chemical Formula 30 having 2PF<sub>6</sub> as a counter ion had a residual dye rate of only 30.2%. Clearly, the organometallic complex cation provides unexpected superiority to the cyanine dyes claimed herein.

There is nothing in Kobayashi that teaches or suggests that the light resistance property of the compounds of Kobayashi can be remarkably improved by changing the counter ion to a monovalent or multivalent anion of an organometallic complex selected from the group consisting of azo, thiocatechol chelate, thiobisphenolate chelate, bisdithiol-alpha-diketone or bisphenyldithiols.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By \_\_\_\_\_  
Anne M. Kornbau  
Registration No. 25,884

AMK:srd  
Telephone No.: (202) 628-5197  
Facsimile No.: (202) 737-3528  
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